

# Attitude and Awareness of Parents towards Early Orthodontics Treatment

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## ABSTRACT

Early orthodontic intervention plays a crucial role in identifying and managing developing dental and skeletal problems in children. Parents' awareness and attitudes significantly influence timely orthodontic evaluation and treatment-seeking behavior. This survey-based study aims to assess the level of knowledge, perceptions, and attitudes of parents toward early orthodontic treatment in primary school children. A structured questionnaire was administered to parents to evaluate their understanding of early orthodontic needs, perceived benefits, barriers to seeking treatment, and willingness to pursue orthodontic care for their children. The findings highlight existing gaps in parental awareness and indicate a generally positive attitude toward early intervention, though influenced by factors such as socioeconomic status, education level, and access to dental services. The results underscore the need for targeted educational programs to enhance parental understanding and encourage early orthodontic assessment for optimal oral health outcomes.

### Background:

Early orthodontic treatment is essential for detecting and correcting dental and skeletal issues in growing children. Timely intervention can reduce the severity of future orthodontic problems and the need for more complex procedures. Parental awareness and attitude play a pivotal role in ensuring that children receive appropriate and timely orthodontic care. This study aims to evaluate the knowledge, perceptions, and attitudes of parents regarding early orthodontic treatment.

### Materials and Methods:

A cross-sectional survey was conducted among parents of children aged 6 to 12 years. A structured questionnaire was developed to collect data on parental awareness, understanding of early orthodontic needs, attitudes toward seeking treatment, and sources of information. The questionnaire included both closed- and open-ended questions and was distributed in pediatric dental clinics and schools. Descriptive statistics were used to analyze the data.

### Results:

The findings revealed that while a majority of parents were aware of general dental care for children, only a limited number had adequate knowledge about the ideal timing and benefits of early orthodontic intervention. Awareness levels were significantly associated with factors such as parental education, income, and previous exposure to orthodontic services. Despite limited knowledge, most parents expressed a positive attitude towards seeking early orthodontic care if advised by a dental professional.

### Conclusion:

The study highlights a gap in parental awareness concerning early orthodontic treatment, despite generally favorable attitudes. Enhancing parental education through targeted outreach and regular dental consultations can contribute to improved orthodontic outcomes for children. Collaboration between dental professionals, schools, and community health programs is recommended to bridge the knowledge gap and encourage timely orthodontic evaluation.

#### 1. Background

Early orthodontic treatment plays a vital role in identifying and managing dental and skeletal irregularities during a child's developmental years. Intervening at the right stage of growth can simplify future treatment, reduce the risk of

complications, and enhance overall oral health. Despite its importance, many parents may lack adequate awareness about when and why early orthodontic evaluation is necessary. Since parents are key decision-makers in seeking healthcare for their children, their understanding and attitudes significantly influence the timing and effectiveness of orthodontic intervention. Therefore, assessing parental knowledge and perceptions regarding early orthodontic treatment is essential to improving treatment outcomes and promoting preventive dental care practices.

## **MATERIALS AND METHODS**

### **2.1 Study Design**

This research employed a cross-sectional survey design to assess parental awareness and attitudes toward early orthodontic treatment. The study targeted parents of children aged between 6 and 12 years, as this age group is considered critical for early orthodontic assessment. A structured, self-administered questionnaire was developed and distributed in selected pediatric dental clinics and schools. The questionnaire consisted of multiple-choice and Likert-scale questions covering areas such as knowledge of early orthodontic issues, attitudes toward treatment, and sources of dental health information. Participation was voluntary, and informed consent was obtained from all respondents. The collected data were analyzed using descriptive statistics to determine patterns and correlations in parental responses.

### **2.2. Questionnaire characteristics**

A structured questionnaire was carefully designed to gather information on parents' awareness, knowledge, and attitudes regarding early orthodontic treatment. The tool was developed based on existing literature and expert input from orthodontists and pediatric dentists to ensure content validity and relevance. The questionnaire was divided into four main sections. The first section collected demographic information, including the parent's age, gender, education level, occupation, and socioeconomic background, as well as the age and gender of their child.

The second section assessed general awareness of dental and orthodontic health, including knowledge of common orthodontic problems in children, ideal age for the first orthodontic visit, and the importance of early intervention. The third section focused on parental attitudes toward early orthodontic care. It included questions on the perceived necessity, cost, and benefits of early treatment, as well as willingness to follow through with professional recommendations. Responses were measured using a 5-point Likert scale ranging from "strongly disagree" to "strongly agree."

The final section explored the sources from which parents obtained information about orthodontic treatment, such as dentists, social media, schools, friends, or family. The questionnaire was pre-tested on a small group of parents to ensure clarity, appropriateness, and ease of understanding. Feedback was used to make minor modifications before final distribution. The survey was administered both in print and digital format, allowing flexibility in participation. Completion of the questionnaire typically took between 5 to 10 minutes.

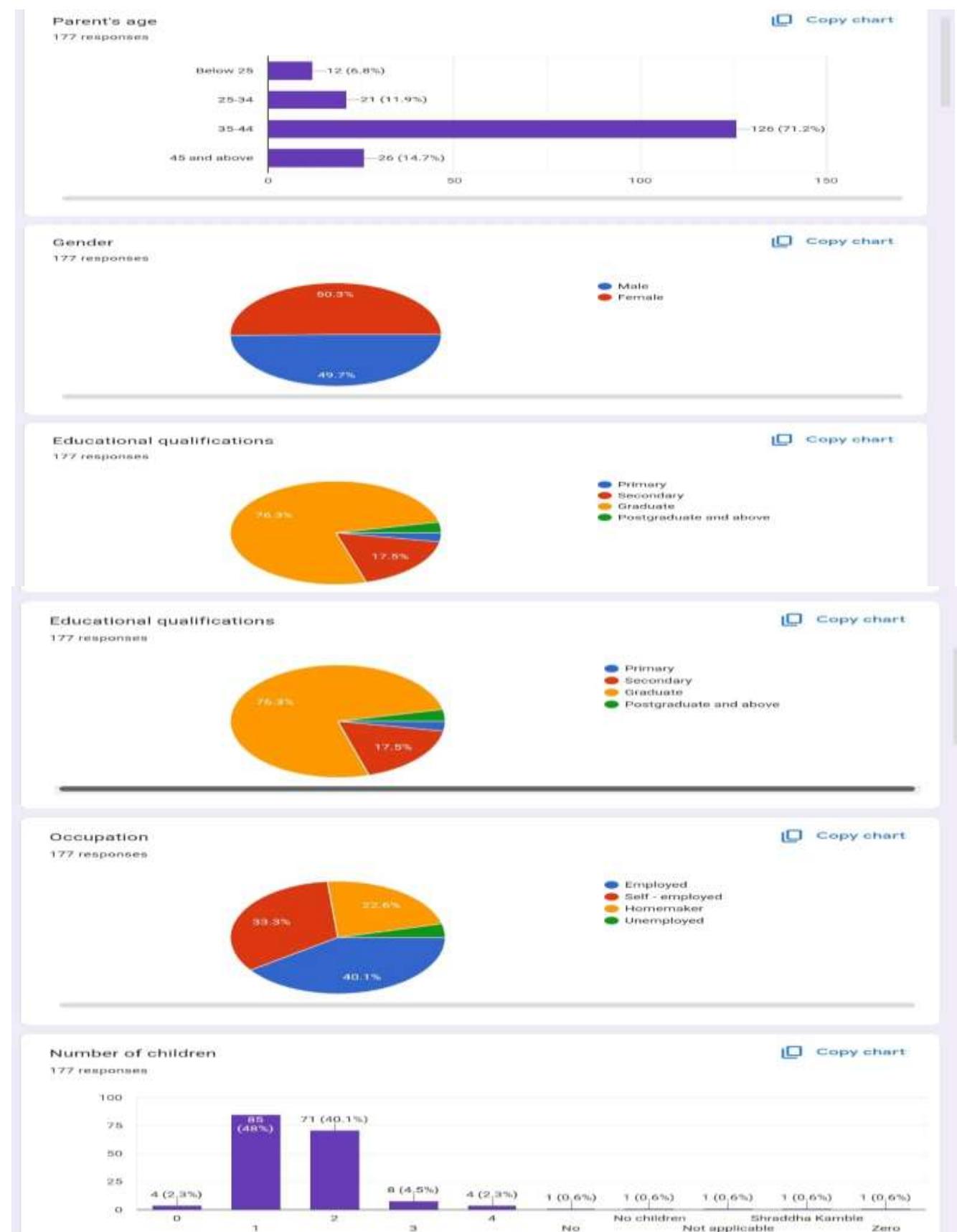
### **2.3 Statistical analysis**

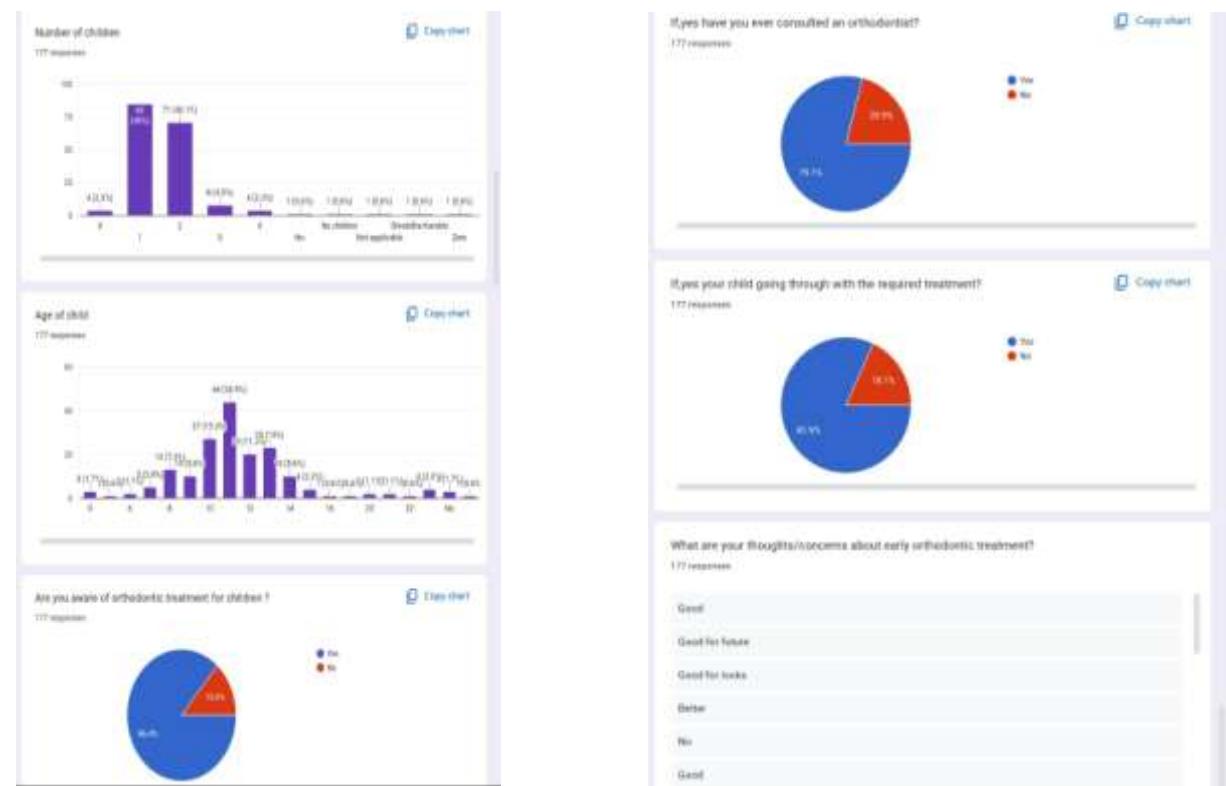
The collected data were organized and analyzed using standard statistical methods to evaluate the levels of parental awareness and attitudes toward early orthodontic treatment. All responses were first checked for completeness and accuracy before being entered into a statistical software program, such as SPSS (Statistical Package for the Social Sciences), for analysis. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize demographic characteristics and general response patterns. These statistics provided an overview of parental knowledge levels, common attitudes, and the distribution of responses across different questions.

To explore relationships between variables, inferential statistical tests were employed. The Chi-square test was used to examine associations between categorical variables, such as parental education level and awareness of early orthodontic treatment. Independent t-tests or ANOVA were applied where appropriate to compare mean scores across different demographic groups, such as age, gender, and socioeconomic status.

A significance level of  $p < 0.05$  was considered statistically significant for all tests. This threshold helped determine whether observed differences or associations were likely due to chance or reflected true relationships. Results were presented in the form of tables and charts for clarity and ease of interpretation. The statistical analysis provided insights into key factors influencing parental awareness and attitudes, which can help inform future educational and outreach efforts in pediatric and orthodontic care.

### 3. Results

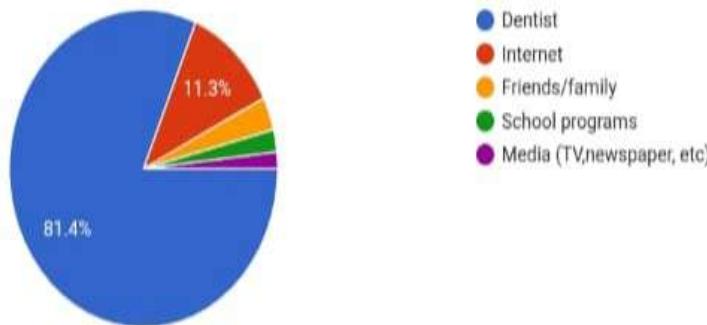




What are the source of your information?

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177 responses



Dentist

Internet

Friends/family

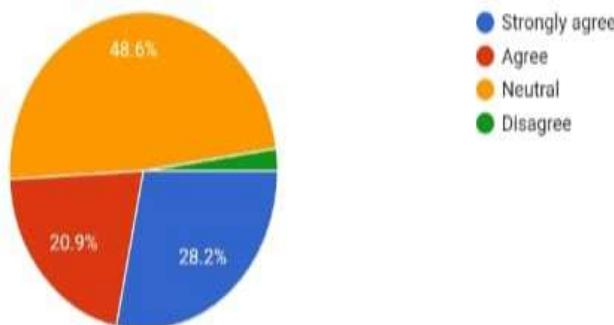
School programs

Media (TV,newspaper, etc)

Do you think early orthodontic treatment is important?

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177 responses



Strongly agree

Agree

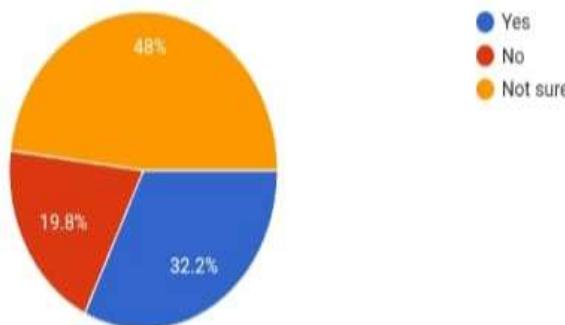
Neutral

Disagree

Would you consider taking your child for an orthodontic evaluation before age 7?

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177 responses



Yes

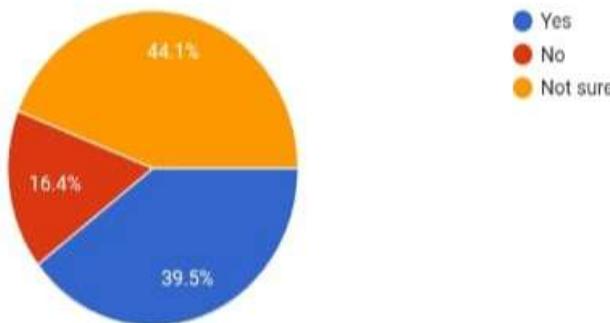
No

Not sure

Do you believe early treatment can prevent severe problem later?

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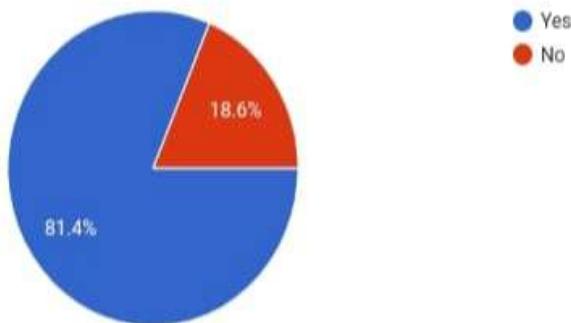
177 responses



Do ou think that your child's teeth would ever have a significant impact on his/her personality ?

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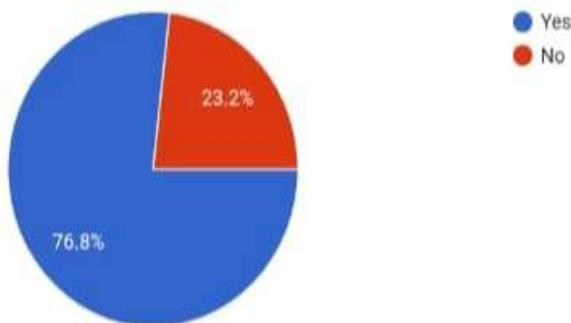
177 responses



Do you think your child has some problem with the positioning/alignment/symmetry of his/her teeth?

 Copy chart

177 responses



A total of [insert number] parents participated in the survey, with a majority falling within the age range of [insert age range]. Most respondents were mothers, and a significant proportion held at least a secondary or tertiary level of education. The majority of participants reported having one or more children aged 6 to 12 years. Analysis of the responses revealed that while general awareness of dental health was relatively high, specific knowledge regarding early orthodontic treatment was limited. Only a small percentage of parents correctly identified the recommended age for a child's first orthodontic assessment, and few were aware of common signs indicating the need for early intervention. Despite this limited awareness, overall parental attitudes toward early orthodontic care were positive. Most respondents agreed that early treatment could prevent future complications and improve their child's oral health. However, concerns were noted regarding the cost and necessity of early treatment in the absence of visible dental problems. Statistical analysis showed significant associations between awareness levels and factors such as parental education and previous exposure to orthodontic information. Parents with higher educational backgrounds and those who had received information from dental professionals demonstrated greater awareness and more favorable attitudes. Sources of information varied, with dentists and dental clinics being the most commonly cited, followed by the internet, schools, and social circles. A considerable number of parents expressed interest in receiving more guidance on early orthodontic care through schools or dental awareness programs. These findings highlight a noticeable gap between positive attitudes and actual knowledge, indicating a need for targeted educational efforts.

## **DISCUSSION**

The findings of this study highlight a significant gap between parental attitudes and knowledge regarding early orthodontic treatment. While many parents expressed a generally positive outlook toward early intervention, detailed understanding of its purpose, timing, and benefits was often lacking. This aligns with previous research showing that although parents are key decision-makers in their children's healthcare, they often rely on limited or informal sources for dental information. One notable observation was the influence of educational background on awareness levels. Parents with higher education or prior experience with orthodontic care were more likely to be informed about the importance of early evaluation. This suggests that increasing awareness through structured educational initiatives could significantly improve early treatment-seeking behavior. The role of dental professionals was also prominent, as parents who received information directly from dentists showed higher awareness and trust in orthodontic recommendations.

This emphasizes the responsibility of dental practitioners not only in treating but also in educating parents during routine visits. Despite general support for early orthodontic treatment, misconceptions remain—particularly around cost and perceived necessity when no obvious problems are present. Addressing these concerns through school-based dental health programs, community workshops, and parent-focused campaigns could bridge the knowledge gap. Overall, the study underscores the need for targeted communication strategies to educate parents on the importance of timely orthodontic assessment. Early identification and treatment of orthodontic issues can prevent more complex problems later in life, reduce treatment duration, and improve long-term oral health outcomes.

## **CONCLUSION**

This survey highlights the disparity between parental attitudes and actual knowledge regarding early orthodontic treatment. While most parents demonstrated a positive attitude and willingness to pursue early care for their children, many lacked accurate information about the appropriate timing, benefits, and indications for early orthodontic intervention. The findings suggest that parental awareness is influenced by factors such as educational level, socioeconomic status, and prior exposure to dental professionals. Those with higher education or who had received orthodontic advice from a dentist were more likely to understand the value of early treatment. Despite the overall supportive attitude, misconceptions about the necessity and cost of early orthodontics were evident. Many parents believed treatment was only needed when visible dental problems appeared, overlooking the importance of preventive and interceptive care during growth and development. To address these gaps, there is a clear need for more effective communication and public health education focused on early orthodontic awareness. Dental professionals, schools, and community health programs should collaborate to deliver accurate, accessible information to parents. Encouraging routine dental check-ups and integrating orthodontic screenings into school health programs could also help ensure timely diagnosis and intervention. In conclusion, enhancing parental knowledge through targeted education and professional guidance is essential to promote early orthodontic care. Bridging the gap between awareness and action will contribute to improved oral health outcomes for children and reduce the need for more complex treatments in the future.

### **Acknowledgments**

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